

MODEL : SB-6310R & SB-6310T

CAT5 VGA EXTENDER



Receiver



Transmitter

CAT5 VGA EXTENDER VGA(RGBHV) & STEREO AUDIO

CAT5 Transmitter/Repeater/Receiver Series

Thank you for purchasing the VGA CAT5 SB-6310T Transmitter or SB-6310R Receiver. You will find this unit easy to install and highly reliable but it is essential that you read this manual thoroughly before attempting to use this Extender.



SAFETY INFORMATION



1. To ensure the best results from this product, please read this manual and all other documentation before operating your equipment. Retain all documentation for future reference.
2. Follow all instructions printed on unit chassis for proper operation.
3. To reduce the risk of fire, do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
4. Make sure power outlets conform to the power requirements listed on the back of the unit. Keep unit protected from rain, water and excessive moisture.
5. Do not attempt to clean the unit with chemical solvents or aerosol cleaners, as this may damage the unit. Dust with a clean dry cloth.
6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
7. Do not force switched or external connections in any way. They should all connect easily, without needing to be forced.
8. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
9. AC voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty.
10. Turn power off and disconnect unit from AC current before making connections.
11. Never hold a power switch in the "ON" position.
12. This unit should be installed in a cool dry place, away from sources of excessive heat, vibration, dust, moisture and cold. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign dust and matter.
14. To reduce the risk of electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. There are no user serviceable parts inside.
15. When moving the unit, disconnect input ports first, then remove the power cable; finally, disconnect the interconnecting cables to other devices.
16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
17. The equipment power cord should be unplugged from the outlet when left unused for a long period of time.
18. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
19. Service Information Equipment should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the equipment.
 - C. The equipment has been exposed to rain
 - D. The equipment does not appear to operate normally, or exhibits a marked change in performance
 - E. The equipment has been dropped, or the enclosure damaged.

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INTRODUCTION



Congratulations on your purchase of one the most innovative CAT5 Transmitter/Repeater/Receiver product on the market Today. The SB-6310 is a transmitter its driving VGA signals over long lines by category cable to SB-6310R CAT5 receiver, high performance VGA(640x480), SVGA(800x600), XGA(1024x768), SXGA(1280x1024), UXGA(1600x1200), WUXGA(1900x1200) driving with a ADC's digital signal. Signals VGA and stereo audio with a maximum extension of 1000 ft. between transmitter and receiver. And use category 5 cable. The terminators are RJ-45 (Category 5) jack and VGA HD-15, Earphone jack.

PACKAGE CONTENTS

Check that you have the following components;

- SB-6310 Transmitter or Repeater or Receiver
- Users Guide
- AC/DC Adapter: 12VDC, @300mA
AC/DC Adaptor Types : CE/UL/SAA/BS

-VGA : RGBHV
- Stereo Audio: AR, AL

Power Input: SB-6310T +12V DC@300mA 
SB-6310R +12V DC @300mA 

SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

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FEATURES & SPECIFICATIONS

FEATURES

SB-6310 TRANSMITTER

- Input: 1 x VGA (RGBHV) + Stereo Audio
- Output: 1 x VGA (RGBHV) + Stereo Audio
4 x CATS (Tx) Transmitter Distribution

SB-6310 RECEIVER

- Input: 1 x CAT5 (Rx) Receiver
- Output: 2 x VGA(RGBHV)+Stereo Audio
- Loop Output: 1 x CATS (Tx) Repeater

SPECIFICATIONS

- **Model Number:** SB-6310T (Tx), SB-6310R (Rx)
- **Tx, Rx Input/Output:** Transmitter & Receiver
- **Type of Signals:** VGA/Stereo Audio
- **Cable for CAT5, 5e, 6:**
 - VGA Resolution:
 - SXGA (1280x1024) 450 feet
 - XGA (1024 x 768) 600 feet
 - VGA (640 x 480) 1000 feet
- **Video Bandwidth:**
 - Tx : 400 Mhz, 13dB full power
 - Rx : 270MHz 1090V/us@G= +1
- **Tx Slew Rate:** 2000 V/us
- **Video Maximum Input Levels:** 1.45 Vp-p
- **Rx High input Impedance:** 1 MΩ differential
- **Audio Frequency Response:** 20Hz to 20KHz, +/-1db
- **Audio Maximum Input Levels:** 3.1 Vp-p (line level)
- **Low Distortion:**
 - Tx: 68dB SFDR@5 Mhz 200Ω load
 - Rx: 1 Vp-p@5MHz
- **In/Out Terminal:** RJ-45 Jack, HD-15 and Ear phone Jack female connectors
- **Size(LxWxH):** 2.75 in x 4.40 in x 1 in (70x78x26mm)
- **Net Weight (Unit only):** 0.48 lbs. (0.26kg) Approx
- **Power Consumed:** @100mA
- **Power Source:** DC 12 Volts @300mA

TYPICAL HOOKUP AND OPERATION

SB-6310



TRANSMITTER

Front:
Input: VGA+Stereo
Audio
Output: VGA & Stereo
Audio

Rear:
Output: 4x CAT5 (Tx)
Transmitter

Power Output:
DC12V, @300mA



RECEIVER

Front:
Input : 1x CAT5 (Rx)
Receiver
Output: 1x CAT5 (Tx)
Repeater (Loop out)
Power Input : DC 12V,
@300mA

Rear:
Output : 2x VGA/
Stereo Audio
Distribution
Power output : DC12V,
@300mA

VGA Transmitter signals : VGA(640x480) , SVGA(800x600) , XGA(1024x768) , SXGA(1280x1024) , UXGA(1600x1200) , WUXGA(1900x1200)

Safeguards and Precautions

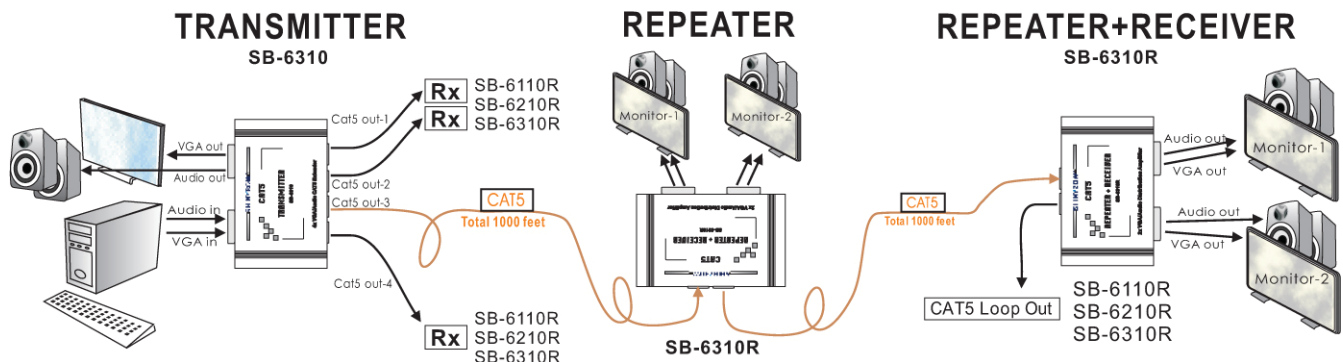
- Keep this unit away from fire, extremely hot areas, water or moisture of any kind.
- Do not place this unit on any support that is not firm, level and strong.
- Do not service the unit yourself. Opening the unit's housing will void the warranty.
- Servicing must be by ShinybowUSA or by an authorized technician.
- Illegal duplication of copyrighted material is strictly prohibited by Federal Laws.

CAT5 VGA EXTENDER

APPLICATIONS

TX : Video line driver, Digital line driver, Low power differential ADC driver, Signal-ended input to differential output driver

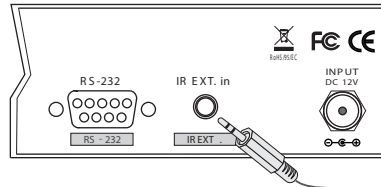
RX : High speed differential line receivers, Differential-to-sigle ended converters, High speed instrumentation amps, level shifting.



IR EXTENDER

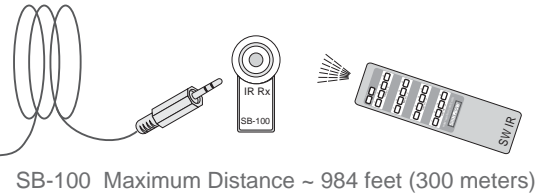
IR RECEIVER:

1. SB-100 IR 300M Receiver

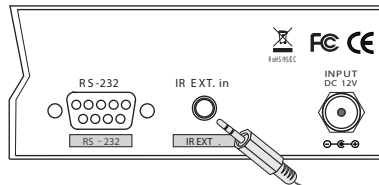


Cable (3C)

IR Receiver (SB-100)

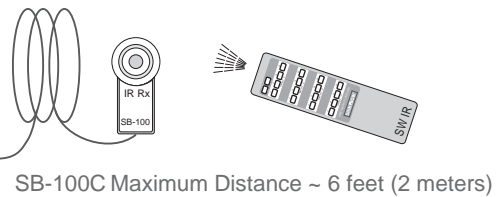


2. SB-100C IR 2M Receiver



Cable (3C)

IR Receiver (SB-100C)



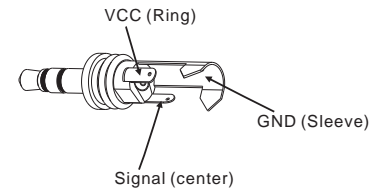
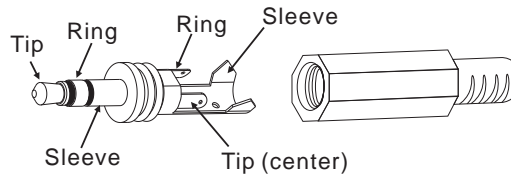
*** When you plug the External IR extender into the switcher, the front panel IR receiver remains active. ***

PIN CONFIGURATION:

SB-100 and SB-100C Receiver Pin configuration



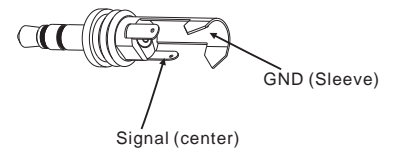
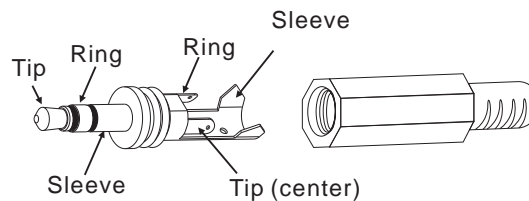
Tip: Signal
Ring: VCC
Sleeve: GND



SB-100 Maximum Distance ~ 984 feet (300 meters)



Tip: Signal
Ring: NC
Sleeve: GND



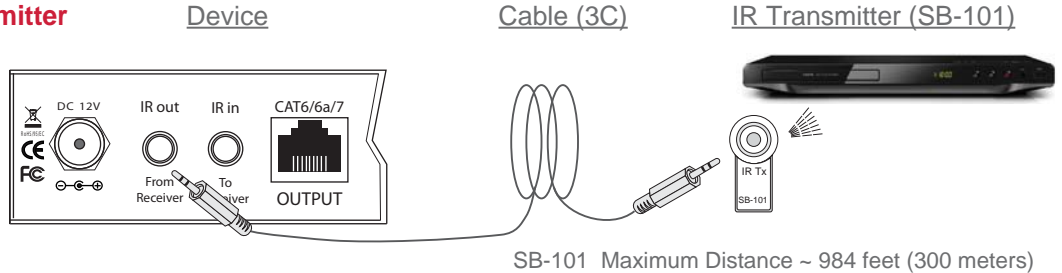
SB-100C Maximum Distance ~ 6 feet (2 meters)

Note: The External IR jack has voltage on the "Ring" portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.

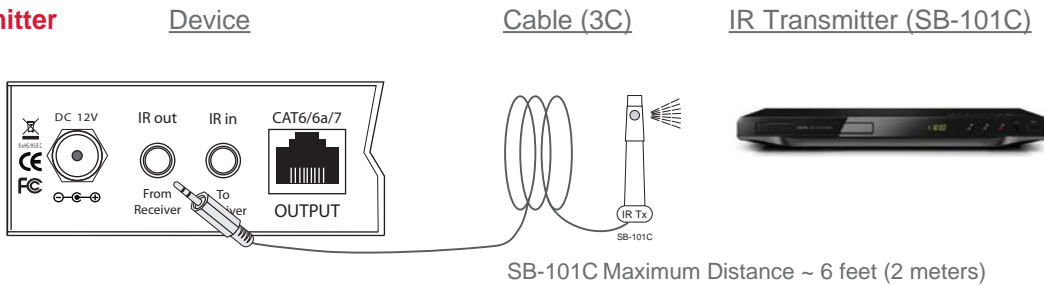
IR EXTENDER

IR EMITTER:

1. SB-101 IR 300M Transmitter



2. SB-101C IR 2M Transmitter



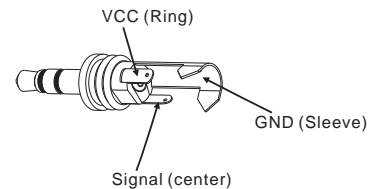
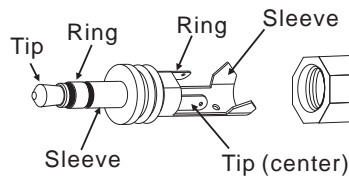
*** When you plug the External IR extender into the switcher, the front panel IR transmitter remains active. ***

PIN CONFIGURATION:

SB-101 and SB-101C Transmitter Pin configuration



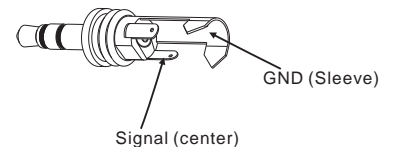
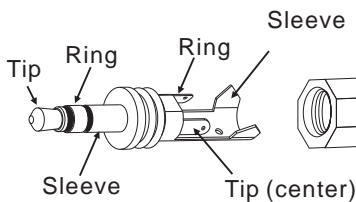
Tip: Signal
Ring: VCC
Sleeve: GND



SB-101 Maximum Distance ~ 984 feet (300 meters)



Tip: Signal
Ring: NC
Sleeve: GND



SB-101C Maximum Distance ~ 6 feet (2 meters)

Note: The External IR jack has voltage on the "Ring" portion of a 3-conductor plug. You must use a 3-conductor plug (aka: stereo plug). Using a 2-conductor plug will short out the power supply. Always make connections with the switcher power off.

LIMITED WARRANTY

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